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24504	7590	02/04/2005	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP			NEGRON, ISMAEL	
100 GALLERIA PARKWAY, NW			ART UNIT	PAPER NUMBER
STE 1750				2875
ATLANTA, GA 30339-5948				

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/927,193	STARNER ET AL.	
	Examiner	Art Unit	
	Ismael Negron	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 5 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 December 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 63-100 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 63-100 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20041215</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on December 15, 2004 has been entered. No claim has been amended. Claims 1-62 have been cancelled. Claims 63-100 have been added. Claims 63-100 are still pending in this application, with claims 63, 73, 82 and 92 being independent.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 64 and 67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 64 is indefinite as it is not clear if the applicant's intention was to claim an alternative limitation (e.g. Markush group), or and inclusive limitation necessarily including all (emphasis added) the recited elements of the claimed group of electrical devices. For the purpose of Prior Art rejection the Examiner assumed the cited claim to present a Markush group.

Claim 67 is indefinite as it is not clear if the applicant's intention was to claim an alternative limitation (e.g. Markush group), or and inclusive limitation necessarily including all (emphasis added) the recited conditions of the claimed group of user's

health related conditions. For the purpose of Prior Art rejection the Examiner assumed the cited claim to present a Markush group.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 92 and 100 are rejected under 35 U.S.C. 102(b) as being anticipated by OH (U.S. Pat. 5,616,078).

OH discloses a system having:

- **an image capturing device (as recited in Claim 92), Figure 1, reference number 1;**
- **the capturing device having a portable housing (as recited in Claim 92), as evidenced by column 4, lines 50-58;**
- **the housing being configured to be worn on a user (as recited in Claim 92), as evidenced by column 4, lines 50-58;**
- **the capturing device including a light-emitting device (as recited in Claim 63), as evidenced by column 4, lines 50-58;**

- **the light emitting device being configured to emit light on an object of the user (as recited in Claim 92), as evidenced by column 4, lines 50-58;**
- **the light emitted by the light emitting device being infrared light (as recited in Claim 92), column 4, lines 54 and 55;**
- **the capturing device further including an image-forming device (as recited in Claim 92), Figure 1, reference numbers 31 and 31';**
- **the image-forming device being configured to form one or more images of the object (as recited in Claim 92), column 4, lines 21-23;**
- **the image being formed due to the emitted light that is reflected from the object (as recited in Claim 92), column 4, lines 25-28;**
- **the capturing device even further including a processor (as recited in Claim 92), Figure 1, reference number 33;**
- **the processor being configured to monitor a condition of the user by monitoring data corresponding to the one or more images (as recited in Claim 92), column 4, lines 25-28; and**
- **the image-capturing device is configured to log data that corresponds to the one or more images over a period of time (as recited in Claim 100), as evidenced by column 5, lines 11-23.**

The applicant is advised that the phrase "configured to" merely indicates the ability of the claimed structure to perform a given function. In this case, the apparatus of OH, discloses all the structural limitations of the claimed invention and is therefore considered to meet the "configured to" recitations.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 63-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over OH (U.S. Pat. 5,616,078).

OH discloses a system having:

- **an image capturing device (as recited in Claim 63), Figure 1, reference number 1;**
- **the capturing device having a portable housing (as recited in Claim 63), as evidenced by column 4, lines 50-58;**
- **the housing being configured to be worn on a user (as recited in Claim 63), as evidenced by column 4, lines 50-58;**

- **the capturing device including a light-emitting device (as recited in Claim 63), as evidenced by column 4, lines 50-58;**
- **the light emitting device being configured to emit light on an object of the user (as recited in Claim 63), as evidenced by column 4, lines 50-58;**
- **the capturing device further including an image-forming device (as recited in Claim 63), Figure 1, reference numbers 31 and 31';**
- **the image-forming device being configured to form one or more images of the object (as recited in Claim 63), column 4, lines 21-23;**
- **the image being formed due to the emitted light that is reflected from the object (as recited in Claim 63), column 4, lines 25-28;**
- **the capturing device even further including a processor (as recited in Claim 63), Figure 1, reference number 33;**
- **the processor being configured to analyze motion of the object based on the one or more images (as recited in Claim 63), column 4, lines 25-28;**
- **the processor being also configured to generate at least one command to control an electrical device (as recited in Claim 63), column 4, lines 38-41;**

- **a communication device (as recited in Claim 63), as evidenced by Figure 1;**
- **the communication device being configured to communicate the at least one command from the processor to the electrical device (as recited in Claim 63), column 2, lines 11-17;**
- **the electrical device being one of a light, a car stereo system, a radio, a television, a phone, a computer, a fan, a door, a window, a stereo, a refrigerator, an oven, a dishwasher, a washer, a dryer, an answering machine, a phone, a garage door, a hot plate, window blinds, a night light, an electric blanket, a fax machine, a printer, a wheelchair, an adjustable bed, an intercom, a chair lift an automatic teller machine (ATM), a faucet, a freezer, a cellular phone, a microscope, and an electronic reader (as recited in Claim 64), column 2, lines 11-17;**
- **the light-emitting device is one of a plurality of light-emitting diodes, lasers, a tube light, and a plurality of bulbs (as recited in Claim 68), column 4, lines 50-55;**
- **the light emitted on the object is one of an infrared light, a laser light, a white light, a violet light, an indigo light, a blue light, a green light, a yellow light, an orange light, a red light,**

and ultraviolet light (as recited in Claim 69), column 4, lines 50-

55;

- the object is one of a hand, a finger, a paw, a pen, a pencil, and a leg (as recited in Claim 70), as seen in Figure 1;**
- the processor being coupled to the image-forming device via a bus (as recited in Claim 71), as seen in Figure 1;**
- the motion corresponds to a gesture for controlling the electrical device (as recited in Claim 72), column 2, lines 11-17.**

OH discloses all the limitations of the claims, except:

- the communication device being configured to communicate the at least one command from the processor wirelessly to the electrical device (as recited in Claim 63);**
- the processor processes data that corresponds to the one or more images to monitor a health related condition of a user (as recited in Claim 65);**
- the processor being further configured to detect tremors of the user to monitor the health related condition of the user (as recited in Claim 66); and**
- the health related condition of the user is one of Parkinson's syndrome, insomnia, eating habits, alcoholism, over-medication, and hypothermia (as recited in Claim 67).**

The examiner takes Official Notice that the use of wireless communication devices is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a wireless link between the processor and the controlled electrical device (as recited in Claim 63) of the system of OH. One would have been motivated to be able to locate the controlled electrical device independently and remotely of the device of OH. See Section 7 of the instant Office Action for a collection of exemplary references having wireless control systems for electrical devices.

In addition, The Examiner takes Official Notice of applicant's statements regarding the old and well known in the art status of communication buses having wireless connections (as recited in Claim 63). It is also noted that the claimed wireless connection is disclosed as a mere example of the many communication buses contemplated by the applicant, without a specific type of bus having any criticality to the claimed invention. See page 5, lines 4 and 5 of the specification as filed.

Regarding the device of OH being used to monitor and/or detect specific health conditions (as recited in claims 65-67), it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the apparatus of OH and GARRISS to monitor health conditions such as tremors, Parkinson's syndrome, insomnia, eating habits, alcoholism, over-medication, hypothermia and drinking habits, and wherein the user is one of a machine, a human being, a robot, and an animal, to be able to provide indication of a health condition to medical personnel. In addition, the applicant is advised that the phrase "configured to" merely indicates the ability of the

claimed structure to perform a given function. In this case, the apparatus of OH, discloses all the structural limitations of the claimed invention and is therefore considered to meet the "configured to" recitations.

Regarding method claims 73-81, such limitations were considered as inherently disclosed by the structural limitations of the device of OH.

5. Claims 82-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over OH (U.S. Pat. 5,616,078).

OH discloses a system having:

- **means for capturing an image (as recited in Claim 82),** Figure 1, reference number 1;
- **the means for capturing having a portable housing (as recited in Claim 82),** as evidenced by column 4, lines 50-58;
- **the housing being configured to be worn on a user (as recited in Claim 82),** as evidenced by column 4, lines 50-58;
- **the means for capturing including a light-emitting device (as recited in Claim 82),** as evidenced by column 4, lines 50-58;
- **the means for emitting light being for emitting light on an user (as recited in Claim 82),** as evidenced by column 4, lines 50-58;

- **the means for capturing further including a means for forming images (as recited in Claim 82), Figure 1, reference numbers 31 and 31';**
- **the means for forming images being forming one or more images of the object (as recited in Claim 82), column 4, lines 21-23;**
- **the images being formed due to the emitted light that is reflected from the object (as recited in Claim 82), column 4, lines 25-28;**
- **the means for capturing even further including means for processing (as recited in Claim 82), Figure 1, reference number 33;**
- **the means for processing being configured to analyze motion of the object based on the one or more images (as recited in Claim 82), column 4, lines 25-28;**
- **the means for processing being also configured to generate at least one command to control an electrical device (as recited in Claim 82), column 4, lines 38-41;**
- **means for communicating (as recited in Claim 82), as evidenced by Figure 1;**

- **the means for communication being for communicating the at least one command from the processor to the electrical device (as recited in Claim 82), column 2, lines 11-17;**
- **the electrical device being one of a light, a car stereo system, a radio, a television, a phone, a computer, a fan, a door, a window, a stereo, a refrigerator, an oven, a dishwasher, a washer, a dryer, an answering machine, a phone, a garage door, a hot plate, window blinds, a night light, an electric blanket, a fax machine, a printer, a wheelchair, an adjustable bed, an intercom, a chair lift an automatic teller machine (ATM), a faucet, a freezer, a cellular phone, a microscope, and an electronic reader (as recited in Claim 83), column 2, lines 11-17;**
- **the light-emitting device is one of a plurality of light-emitting diodes, lasers, a tube light, and a plurality of bulbs (as recited in Claim 87), column 4, lines 50-55;**
- **the light emitted on the object is one of an infrared light, a laser light, a white light, a violet light, an indigo light, a blue light, a green light, a yellow light, an orange light, a red light, and ultraviolet light (as recited in Claim 88), column 4, lines 50-55;**

- **the object is one of a hand, a finger, a paw, a pen, a pencil, and a leg (as recited in Claim 89), as seen in Figure 1;**
- **the means for processing being coupled to the image-forming device via a bus (as recited in Claim 90), as seen in Figure 1;**
- **the motion corresponds to a gesture for controlling the electrical device (as recited in Claim 91), column 2, lines 11-17.**

OH discloses all the limitations of the claims, except:

- the communication device being configured to communicate the at least one command from the processor wirelessly to the electrical device (as recited in Claim 82);
- the means for processing being configured to processes data that corresponds to the one or more images to monitor a health related condition of a user (as recited in Claim 84);
- the processor being further configured to detect tremors of the user to monitor the health related condition of the user (as recited in Claim 85); and
- the health related condition of the user is one of Parkinson's syndrome, insomnia, eating habits, alcoholism, over-medication, and hypothermia (as recited in Claim 86).

The examiner takes Official Notice that the use of wireless communication devices is old and well known in the art. It would have been obvious to one of ordinary

skill in the art at the time the invention was made to use a wireless link between the processor and the controlled electrical device (as recited in Claim 82) of the system of OH. One would have been motivated to be able to locate the controlled electrical device independently and remotely of the device of OH. See Section 7 of the instant Office Action for a collection of exemplary references having wireless control systems for electrical devices.

In addition, The Examiner takes Official Notice of applicant's statements regarding the old and well known in the art status of communication buses having wireless connections. It is also noted that the claimed wireless connection is disclosed as a mere example of the many communication buses contemplated, without a specific type of bus having any criticality to the claimed invention. See page 5, lines 4 and 5 of the specification as filed.

Regarding the device of OH being used to monitor and/or detect specific health conditions (as recited in claims 84-86), it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use the apparatus of OH and GARRISS to monitor health conditions such as tremors, Parkinson's syndrome, insomnia, eating habits, alcoholism, over-medication, hypothermia and drinking habits, and wherein the user is one of a machine, a human being, a robot, and an animal, to be able to provide indication of a health condition to medical personnel. In addition, the applicant is advised that the phrase "configured to" merely indicates the ability of the claimed structure to perform a given function. In this case, the apparatus of OH,

discloses all the structural limitations of the claimed invention and is therefore considered to meet the "configured to" recitations.

6. Claims 93-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over OH (U.S. Pat. 5,616,078).

OH discloses a system having:

- **an image capturing device (as recited in Claim 92), Figure 1, reference number 1;**
- **the capturing device having a portable housing (as recited in Claim 92), as evidenced by column 4, lines 50-58;**
- **the housing being configured to be worn on a user (as recited in Claim 92), as evidenced by column 4, lines 50-58;**
- **the capturing device including a light-emitting device (as recited in Claim 63), as evidenced by column 4, lines 50-58;**
- **the light emitting device being configured to emit light on an object of the user (as recited in Claim 92), as evidenced by column 4, lines 50-58;**
- **the light emitted by the light emitting device being infrared light (as recited in Claim 92), column 4, lines 54 and 55;**
- **the capturing device further including an image-forming device (as recited in Claim 92), Figure 1, reference numbers 31 and 31';**

- **the image-forming device being configured to form one or more images of the object (as recited in Claim 92), column 4, lines 21-23;**
- **the image being formed due to the emitted light that is reflected from the object (as recited in Claim 92), column 4, lines 25-28;**
- **the capturing device even further including a processor (as recited in Claim 92), Figure 1, reference number 33; and**
- **the processor being configured to monitor a condition of the user by monitoring data corresponding to the one or more images (as recited in Claim 92), column 4, lines 25-28.**

OH discloses all the limitations of the claims, except:

- the processor being further configured to detect tremors of the user to monitor the health related condition of the user (as recited in Claim 93);
- the processor being configured to perform a fast Fourier transform on the data to determine the frequency of the tremors (as recited in Claim 94);
- the processor being configured to ignore motion of the object below 2 Hz in a frequency domain (as recited in Claim 95).

- the image capturing device being configured to provide automatic control of an electrical device based on the frequency of the tremors (as recited in Claim 96);
- the tremors being pathological tremors (as recited in Claim 97); and
- the condition being a health related condition of a user (as recited in claims 98 and 99).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to detect tremors (as recited in Claim 94), provide automatic control based on the frequency of the tremors (as recited in Claim 96), the tremors being pathological tremors (as recited in Claim 97), or the condition being a health related condition of a user (as recited in claims 98 and 99) to be able to provide indication of a health condition to medical personnel. In addition, the applicant is advised that the phrase "configured to" merely indicates the ability of the claimed structure to perform a given function. In this case, the apparatus of OH, discloses all the structural limitations of the claimed invention and is therefore considered to meet the "configured to" recitations.

Regarding the processor being configured to perform a fast Fourier transform on the data to determine the frequency of the tremors (as recited in Claim 94), or to ignore motion of the object below 2 Hz in a frequency domain (as recited in Claim 95), the applicant is once again advised that the phrase "configured to" merely indicates the ability of the claimed structure to perform a given function. In this case, the apparatus

of OH discloses all the structural limitations of the claimed invention and is therefore considered to meet the "configured to" recitations.

Relevant Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Simpson et al. (U.S. Pat. 4,995,053), **DeLand et al.** (U.S. Pat. 5,140,316), **Ivie et al.** (U.S. Pat. 5,815,086), **Brude et al.** (U.S. Pats. 5,909,087 and 6,169,377) and **Howard** (U.S. Pat. 6,747,632) disclose systems for wirelessly controlling electrical devices.

Response to Arguments

8. Applicant's arguments filed December 15, 2004, comparing newly presented claims 63, 73, 82 and 92 to the OH (U.S. Pat. 5,616,078) reference, have been fully considered but they are not persuasive.

The applicant is respectfully directed to sections 3-6 where detailed rejection statements are presented for such claims.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negron whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached at (571) 272-2378. The facsimile machine number for the Art Group is (703) 872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications maybe obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.

Inr

January 26, 2005



JOHN ANTHONY WARD
PRIMARY EXAMINER